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BAKER BOTTS L.L.P. 2001 ROSS AVENUE SUITE 600 DALLAS, TX 75201-2980			EXAMINER MATTIS, JASON E	
			ART UNIT 2416	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/680,957	Applicant(s) ANDRIANTSIFERANA ET AL.	
	Examiner JASON E. MATTIS	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-11,13,14,16-18 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-11,13,14,16-18 and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the Request for Continued Examination filed 8/19/08. New claims 22-26 have been added. Claims 2, 7, 12, 15, and 19 are cancelled. Claims 1, 3-6, 8-11, 13, 14, 16-18, and 20-26 are currently pending in the application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18, 20, 21, and 26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 18, 20, 21, and 26, each of these claims is directed towards "software". "Software" does not fall into one of the statutory categories of invention as outlined by 35 U.S.C. 101. It is noted that claim 18 does include the language "the software comprising computer code embodied on a computer readable medium"; however, since it is the software itself that is claimed, these claims are considered non-statutory. It is recommended that the claims be amended such that the "computer readable medium" is claimed instead of the software (i.e. "A computer readable medium comprising computer code that when executed by a processor is operable to...").

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11, 13, 14, 16-18, 20, 21, and 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, line 14 of this claim contains the term "the GGSN". There is a lack of antecedent basis for "the GGSN" in the claim. It is recommended that the claim be amended such that there is proper antecedent basis for each use of the term "the GGSN" and such that the acronym "GGSN" is defined within the claim.

Regarding claim 14, line 13 of this claim contains the term "the GGSN". There is a lack of antecedent basis for "the GGSN" in the claim. It is recommended that the claim be amended such that there is proper antecedent basis for each use of the term "the GGSN" and such that the acronym "GGSN" is defined within the claim. Further, line 15 of this claim contains the term "the CSPG". There is a lack of antecedent basis for "the CSPG" in the claim. It is recommended that the claim be amended such that there is proper antecedent basis for each use of the term "the CSPG" and such that the acronym "CSPG" is defined within the claim.

Regarding claim 16 and 18, these claims contain similar lack of antecedent basis problems with respect to the terms "the GGSN" and "the CSPG" as discussed with respect to claim 14 above. Similar corrections are recommended.

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Claims 13, 15, 20, 21, and 24-26 are rejected since they each depend on rejected base claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-6, 8-11, 13, 14, 16-18, and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jouppi et al. (U.S. Publication US 2003/0221016 A1) in view of Lundin et al. (U.S. Publication US 2008/0096523 A1).

With respect to claim 1, Jouppi et al. discloses an apparatus for relaying information in a network environment **(See the abstract of Jouppi et al. for reference to subsystem for transmitting data flows in a network)**. Jouppi et al. also discloses a gateway general packet radio service support node, GGSN, operable to establish primary and secondary packet data protocol, PDP, links on behalf of an end user **(See page 1 paragraph 2 and page 3 paragraph 26 of Jouppi et al. for reference to a GGSN establishing both primary and secondary PDP contexts)**. Jouppi et al. further discloses the GGSN communicating traffic pattern information associated with the PDP links to a client services packet gateway, CSPG **(See pages 2-3 paragraph 24 and page 4 paragraph 33 for reference to the GGSN exchanging PDP context**

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information regarding both the primary and secondary contexts with a charging gateway CGF, which is a type of CSPG). Jouppi et al. also discloses the traffic pattern information providing data associated with how traffic flows propagation via each of the PDP links are to be treated in the network **(See page 4 paragraph 33 of Jouppi et al. for reference to the GGSN exchanging information with the CGF regarding how each of the PDP contexts are to be treated for charging purposes).** Jouppi et al. further discloses the GGSN being operable to relay traffic pattern information associated with the primary and secondary PDP links through one or more control path interfaces to the CSPG **(See page 4 paragraph 33 or Jouppi et al. for reference to GGSN relaying PDP context information through control path interfaces to the CGF).** Jouppi et al. also discloses the CSPG being external to the GGSN and the traffic pattern information allowing the CSPG to provide an associated service **(See pages 2-3 paragraph 24, page 4 paragraph 33, and Figure 1 of Jouppi et al. for reference to the CGF being external to the GGSN and for reference to information provided by the GGSN to the CSPG allowing the CSPG to providing an associated charging service).** While Jouppi et al. does disclose storing the traffic pattern information such that differentiated billing occurs based on each separate PDP context **(See page 4 paragraph 33 of Jouppi et al. for reference to the CGF storing information such that each of the separate PDP contexts are charged in a different way),** Jouppi et al. does not specifically disclose the traffic pattern information specifying a first quality of service for the primary PDP link and a different second quality of service for the secondary PDP link by adding the traffic pattern information into traffic flows

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communicated through control path interfaces of the GGSN to the CSPG such that the CSPG provides as associated service according to an appropriate quality of service level determined from the traffic pattern information.

With respect to claim 6, Jouppi et al. discloses an apparatus for receiving information in a network environment **(See the abstract of Jouppi et al. for reference to subsystem for receiving data in a network)**. Jouppi et al. also discloses a CSPG operable to receive traffic pattern information from a GGSN **(See pages 2-3 paragraph 24 and page 4 paragraph 33 for reference to the GGSN exchanging PDP context information regarding both the primary and secondary contexts with a charging gateway CGF, which is a type of CSPG)**. Jouppi et al. further discloses the GGSN operable to establish primary and secondary PDP links on behalf of an end user **(See page 1 paragraph 2 and page 3 paragraph 26 of Jouppi et al. for reference to a GGSN establishing both primary and secondary PDP contexts)**. Jouppi et al. also discloses the traffic pattern information providing data associated with how traffic flows propagation via each of the PDP links are to be treated in the network **(See page 4 paragraph 33 of Jouppi et al. for reference to the GGSN exchanging information with the CGF regarding how each of the PDP contexts are to be treated for charging purposes)**. Jouppi et al. further discloses the GGSN being operable to relay traffic pattern information associated with the primary and secondary PDP links through one or more control path interfaces to the CSPG **(See page 4 paragraph 33 or Jouppi et al. for reference to GGSN relaying PDP context information through control path interfaces to the CGF)**. Jouppi et al. also discloses the CSPG being external to

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the GGSN and the traffic pattern information allowing the CSPG to provide an associated service (**See pages 2-3 paragraph 24, page 4 paragraph 33, and Figure 1 of Jouppi et al. for reference to the CGF being external to the GGSN and for reference to information provided by the GGSN to the CSPG allowing the CSPG to providing an associated charging service**). While Jouppi et al. does disclose storing the traffic pattern information such that differentiated billing occurs based on each separate PDP context (**See page 4 paragraph 33 of Jouppi et al. for reference to the CGF storing information such that each of the separate PDP contexts are charged in a different way**), Jouppi et al. does not specifically disclose the traffic pattern information specifying a first quality of service for the primary PDP link and a different second quality of service for the secondary PDP link by adding the traffic pattern information into traffic flows communicated through control path interfaces of the GGSN to the CSPG such that the CSPG provides as associated service according to an appropriate quality of service level determined from the traffic pattern information.

With respect to claim 11, Jouppi et al. discloses a method for relaying information in a network environment (**See the abstract of Jouppi et al. for reference to method for transmitting data flows in a network**). Jouppi et al. also discloses establishing primary and secondary PDP links on behalf of an end user (**See page 1 paragraph 2 and page 3 paragraph 26 of Jouppi et al. for reference to a GGSN establishing both primary and secondary PDP contexts**). Jouppi et al. further discloses communicating traffic pattern information associated with the PDP links to a CSPG (**See pages 2-3 paragraph 24 and page 4 paragraph 33 for reference to the**

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GGSN exchanging PDP context information regarding both the primary and secondary contexts with a charging gateway CGF, which is a type of CSPG).

Jouppi et al. also discloses the traffic pattern information providing data associated with how traffic flows propagation via each of the PDP links are to be treated in the network **(See page 4 paragraph 33 of Jouppi et al. for reference to the GGSN exchanging information with the CGF regarding how each of the PDP contexts are to be treated for charging purposes).** Jouppi et al. further discloses a GGSN being operable to relay traffic pattern information associated with the primary and secondary PDP links through one or more control path interfaces to a CSPG **(See page 4 paragraph 33 or Jouppi et al. for reference to GGSN relaying PDP context information through control path interfaces to the CGF).** Jouppi et al. also discloses the CSPG being external to the GGSN and the traffic pattern information allowing the CSPG to provide an associated service **(See pages 2-3 paragraph 24, page 4 paragraph 33, and Figure 1 of Jouppi et al. for reference to the CGF being external to the GGSN and for reference to information provided by the GGSN to the CSPG allowing the CSPG to providing an associated charging service).** While Jouppi et al. does disclose storing the traffic pattern information such that differentiated billing occurs based on each separate PDP context **(See page 4 paragraph 33 of Jouppi et al. for reference to the CGF storing information such that each of the separate PDP contexts are charged in a different way),** Jouppi et al. does not specifically disclose the traffic pattern information specifying a first quality of service for the primary PDP link and a different second quality of service for the secondary PDP

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link by adding the traffic pattern information into traffic flows communicated through control path interfaces of the GGSN to the CSPG such that the CSPG provides as associated service according to an appropriate quality of service level determined from the traffic pattern information.

With respect to claims 14 and 18, Jouppi et al. discloses a system and software product for relaying information in a network environment **(See the abstract and page 6 paragraph 47 of Jouppi et al. for reference to subsystem for transmitting data flows in a network and for reference to the system being implemented as a computer program executed by a processor)**. Jouppi et al. also discloses a means for establishing primary and secondary PDP links on behalf of an end user **(See page 1 paragraph 2 and page 3 paragraph 26 of Jouppi et al. for reference to a GGSN establishing both primary and secondary PDP contexts)**. Jouppi et al. further discloses a means for communicating traffic pattern information associated with the PDP links **(See pages 2-3 paragraph 24 and page 4 paragraph 33 for reference to the GGSN exchanging PDP context information regarding both the primary and secondary contexts with a charging gateway CGF)**. Jouppi et al. also discloses the traffic pattern information providing data associated with how traffic flows propagation via each of the PDP links are to be treated in the network **(See page 4 paragraph 33 of Jouppi et al. for reference to the GGSN exchanging information with the CGF regarding how each of the PDP contexts are to be treated for charging purposes)**. Jouppi et al. further discloses a GGSN being operable to relay traffic pattern information associated with the primary and secondary PDP links through

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one or more control path interfaces to a CSPG (**See page 4 paragraph 33 or Jouppi et al. for reference to GGSN relaying PDP context information through control path interfaces to the CGF**). Jouppi et al. also discloses the CSPG being external to the GGSN and the traffic pattern information allowing the CSPG to provide an associated service (**See pages 2-3 paragraph 24, page 4 paragraph 33, and Figure 1 of Jouppi et al. for reference to the CGF being external to the GGSN and for reference to information provided by the GGSN to the CSPG allowing the CSPG to providing an associated charging service**). While Jouppi et al. does disclose storing the traffic pattern information such that differentiated billing occurs based on each separate PDP context (**See page 4 paragraph 33 of Jouppi et al. for reference to the CGF storing information such that each of the separate PDP contexts are charged in a different way**), Jouppi et al. does not specifically disclose the traffic pattern information specifying a first quality of service for the primary PDP link and a different second quality of service for the secondary PDP link by adding the traffic pattern information into traffic flows communicated through control path interfaces of the GGSN to the CSPG such that the CSPG provides as associated service according to an appropriate quality of service level determined from the traffic pattern information.

With respect to claims 22-26, Lundin et al. discloses a table included within the CSPG that is operable to store the traffic pattern information such that it may be referenced by the CSPG (**See page 4 paragraph 33 of Jouppi et al. for reference to the CGF storing information such that each of the separate PDP contexts are charged in a different way**). Lundin et al. does not specifically disclose the CSPG

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providing a selected quality of service for a selected one of the primary and secondary PDP links.

With respect to claims 1, 6, 11, 14, 18, and 22-26, Lundin et al., in the field of communications, discloses the traffic pattern information specifying a first quality of service for a first PDP link and a different second quality of service for a second PDP link **(See page 2 paragraph 28 and page 3 paragraph 41 of Lundin et al. for reference to traffic type information being transmitted for different traffic flows including different traffic classifications, which are a qualities of service, for different flows)**. Lundin et al. also discloses adding the traffic pattern information into traffic flows communicated through control path interfaces of a GGSN to a CSPG **(See page 2 paragraph 28, page 3 paragraph 41, page3 paragraphs 43-44, and Figures 4 and 6 of Lundin et al. for reference to a GGSN adding the traffic type information to the GTP header of a downlink payload, which is a part of a traffic flow, and sending the traffic type information over a control path interface to a SGSN having a charging functionality, meaning the SGSN acts as a CSPG)**. Lundin et al. further discloses the CSPG providing as associated service according to an appropriate quality of service level determined from the traffic pattern information **(See page 2 paragraph 28 and page 3 paragraph 41 of Lundin et al. for reference to the SGSN providing a charging functionality, which is an associated service, according to the appropriate traffic classification determined from the traffic type information)**. Referencing traffic pattern information to provide different quality of service levels for different PDP links such that differentiated billing occurs based on the

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different quality of service levels has the advantage of allowing more flexible billing of customers.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Lundin et al., to combine referencing traffic pattern information to provide different quality of service levels for different PDP links such that differentiated billing occurs based on the different quality of service levels, as suggested by Lundin et al., with the system and method of Jouppi et al., with the motivation being to allow more flexible billing of customers.

With respect to claims 3, 8, and 13, Jouppi et al. discloses using a RADIUS protocol (See page 4 paragraph 33 of Jouppi et al. for reference to using RADIUS protocol to transmit information).

With respect to claims 4 and 9, Jouppi et al. discloses the SCPG providing billing services (See page 4 paragraph 33 of Jouppi et al. for reference to the CGF providing charging services).

With respect to claims 5 and 10, Jouppi et al. discloses the traffic pattern information including a source IP address (See page 3 paragraph 27 and page 4 paragraph 33 of Jouppi et al. for reference to using the interface identifier, which is part of the source address, to identify different PDP contexts).

With respect to claims 16 and 20, Jouppi et al. discloses a means for leveraging a communication protocol to deliver the traffic pattern information (See page 4 paragraph 33 of Jouppi et al. for reference to using RADIUS protocol to transmit information).

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With respect to claims 17 and 21, Jouppi et al. discloses a means for receiving the traffic pattern information and providing a service based on the traffic pattern information (**See page 4 paragraph 33 of Jouppi et al. for reference to the CGF providing charging services**).

Response to Arguments

7. Applicant's arguments with respect to claims 1, 3-6, 8-11, 13, 14, 16-18, and 20-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON E. MATTIS whose telephone number is (571)272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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